



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,610	07/01/2003	Kevin J. Shinners	P03384US	1449
36122	7590	03/10/2004	EXAMINER	
DUFT SETTER OLLILA & BORNSEN LLC 2060 BROADWAY SUITE 300 BOULDER, CO 80302			MAMMEN, NATHAN SCOTT	
			ART UNIT	PAPER NUMBER
			3671	

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/611,610	SHINNERS ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Nathan S Mammen	3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 October 2003.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 117-127 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 117-127 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### *Specification*

1. The abstract of the disclosure is objected to because it does not reflect the subject matter claimed in this divisional application. Correction is required. See MPEP § 608.01(b).

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 117-127 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 117 states that the computer “generates a yield amount based upon...a forage processing machinery groundspeed, and a said forage accumulating machinery groundspeed.” (Emphasis added.) In the description of the embodiments of the invention directed to a forage accumulating machine, the specification does not state that the yield amount is based upon two groundspeed signals. Instead, the specification only states that “...a groundspeed...may be used to generate a yield amount.” See, e.g., Specification, ¶¶ 138, 149. The specification does not disclose the yield monitor using two groundspeed signals, nor does it convey that Applicants’ were in possession of a yield monitor using two groundspeed signals.

For similar reasons, claims 117-127 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The specification does not enable one skilled in the art to make and/or use a yield monitor that uses two groundspeed signals.

Claims 118-127 are rejected for being dependent upon a base claim rejected under §112.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 117 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,525,276 to Vallidus et al.

The Vallidus ‘276 patent discloses a yield monitor having a volume increment accumulation device (50) for generating a volume increment accumulation signal. A computer receives the volume increment accumulation signal and generates a yield amount based on the signal and a forage processing machinery groundspeed. Col. 9, line 3 – col. 10, line 14.

6. Claim 117 is rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,272,819 to Wendte et al.

The Wendte ‘819 patent discloses a yield monitor having a volume increment accumulation device (200) for generating a volume increment accumulation signal. Col. 11, lines 11-14. A computer receives the volume increment accumulation signal and generates a

yield amount based on the signal and a forage processing machinery groundspeed. Col. 9, lines 45-65.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 117, 119 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,913,901 to Bottinger et al. in view of U.S. Patent No. 6,525,276 to Vellidus et al.

The Bottinger '901 patent discloses a square baler comprising a volume increment accumulation measuring device that generates a volume increment accumulation signal substantially related to forage mass. Col. 3, lines 19-44. A computer receives the signal and generates a yield amount based on the signal. Col. 4, lines 44-52. What the Bottinger '901 patent does not disclose is that the computer also generates a yield amount based on a machinery groundspeed. The Vellidus '276 patent teaches that it is known in the art to generate a yield amount by taking into account volume and groundspeed. Col. 9, lines 45-65. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the square baler yield monitor of the Bottinger '901 patent to take into account machinery groundspeed as taught by the Vellidus '276 patent, in order to provide an improved yield monitor that can display instantaneous results as the machine is moved through the field.

Regarding claims 122-126: The yield monitor of the Bottinger '901 patent measures a force applied to a baler compression plunger. Col. 3, lines 19-44.

Art Unit: 3671

9. Claims 120 and 121 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,913,901 to Bottinger et al. in view of U.S. Patent No. 6,525,276 to Vellidus et al., as applied to claim 117 above, and further in view of U.S. Patent No. 5,855,166 to McPherson.

The combination of the Bottinger '901 and Vellidus '276 patents teaches the claimed invention, as stated in paragraph 8 above, except for the yield monitor having a measuring wheel. The McPherson '166 patent teaches that it is known in the art to provide a measuring wheel (65) for a square baler. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the combination of the Bottinger '901 and Vellidus '276 patents with the measuring wheel as taught by the McPherson '166 patent, in order to provide a means for measuring the side of the hay bale.

10. Claim 127 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,525,276 to Vellidus et al. in view of U.S. Patent No. 4,487,002 to Kruse et al.

The Vellidus '276 patent discloses the claimed invention, as stated in paragraph 5 above, except for the yield monitor generating a groundspeed control signal. The Kruse '002 patent teaches that it is known in the harvesting art to provide a yield monitor that senses the volume increment measurement (i.e. crop load) and operates to control the harvester speed. It would have been obvious to one having ordinary skill in the art to provide the yield monitor of the Vellidus '276 patent with the speed control feature of the Kruse '002 patent, in order to provide a means for controlling the machine to operate at the optimum speed for the crop being harvested. Kruse, col. 6, line 60- col. 6, line 3.

***Conclusion***

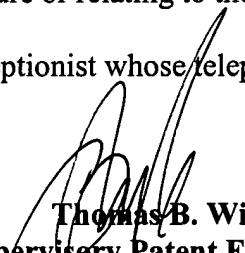
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Mammen whose telephone number is (703) 306-5959.

The examiner can normally be reached Monday through Thursday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at (703) 308-3870. The fax number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.



Thomas B. Will  
Supervisory Patent Examiner  
Group 3600

NSM  
3/3/04

Nathan S. Mammen